

REMARKS

The Examiner has rejected claims 1-3, 6, 15 and 17-19 under 35 U.S.C. § 102(b) as being anticipated by Hirzel U.S. Patent No. 5,176,754. Claims 1 and 5 are rejected under § 102(b) as being anticipated by Wagner U.S. Patent No. 5,611,687. Claims 7-12 are rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough et al. U.S. Patent No. 4,735,604. Claim 13 is rejected under § 103(a) as being unpatentable over Hirzel in view of Torino U.S. Patent No. 2,653,598. Claims 14 and 16 are rejected under § 103(a) as being unpatentable over Hirzel in view of Varaine U.S. Patent No. 5,118,291. Claims 20-27, 40 and 42-46 are rejected under § 103(a) as being unpatentable over Hirzel. Claims 28-37 are rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough et al. Claim 38 is rejected under § 103(a) as being unpatentable over Hirzel in view of Torino. Claim 39 is rejected under § 103(a) as being unpatentable over Hirzel in view of Torino, and further in view of Varaine. Claim 41 is rejected under § 103(a) as being unpatentable over Hirzel in view of Varaine. Claims 47-50, 53 and 55-59 are rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough et al. Claim 51 is rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough, and further in view of Torino. Claim 52 is rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough, and further in view of Torino and Varaine. Claim 54 is rejected under § 103(a) as being unpatentable over Hirzel in view of Watmough, and further in view of Varaine. The following remarks are respectfully submitted.

The independent claims (1, 26, and 47) are amended herein to recite that the roller tip(s) have the following features:

- the roller tip(s) comprise at least one material selected from the group consisting of: a silicone, a thermoplastic elastomer, and polyurethane,
- the roller tip(s) have a Shore A hardness in the range of 20-60, and
- the roller tip(s) have a smooth outer surface and a surface energy less than 25 mN/m adapted to provide low adhesion of a restorative material to the smooth outer surface and bubble-free distribution of a restorative material on a tooth surface.

The first two features were recited in now canceled dependent claims 14-15, 38-39 and 51-52.

Support for the third feature may be found, for example, in the drawings and at paragraphs 0018 and 0025 of the specification. Applicant asserts that no new matter is added by this amendment, and further request entry of the amendment after final. All amendments pertain to matter previously recited in dependent claims or to matter (surface tension and smoothness) that is related to matter considered in previously-presented claims, such that no burden is presented by entry of this amendment.

With respect to the § 102 rejections, the amendments herein render the rejections moot, as the Examiner admits that the both Hirzel and Wagner fail to disclose the claimed roller tip materials and the claimed Shore A hardness. For those teachings, the Examiner relies upon Torino or Varaine (see, e.g., § 103 rejections for claims 13 and 14) combined with Hirzel (or Hirzel in view of Watmough for claim 47).

Hirzel discloses the use of absorbant materials, such as sponges and felt, for her tip covers for distributing materials onto a surface. The claimed invention seeks low surface adhesion between the roller tip surface and a restorative material such that use of an absorbant material as taught by Hirzel is contradictory to the purpose of the claimed invention. Further, the claimed invention seeks smooth, bubble-free application of the restorative material to the tooth surface, which is achieved by the combination of a roller tip that permits quick distribution, a smooth outer surface, and appropriate hardness and surface tension. This purpose and the means of achieving it are neither taught nor suggested by the combination of references.

Torino discloses a gum massager in which the roller tip contains a plurality of protrusions on the surface that would interfere with smooth, bubble-free application of a restorative material, and Torino in no way suggests use of the gum massager for the purpose of applying a material to a surface. One skilled in the art would not look to modify a material distribution roller with features of a surface roughened gum massager that is not designed to distribute material, nor would such combination provide the invention, as claimed. The combination fails to teach or suggest each and every element of the claimed invention.

Varaine, which is cited for purposes of teaching the Shore A hardness, merely teaches a non-rotatable eraser made of similar materials as claimed for the roller tip(s) for the purpose of erasing stains on a tooth by a rubbing action. There is no suggestion that the material may be used for a roller tip for distributing a material onto a tooth surface, as opposed to removing material from a tooth surface by rubbing, and there is no teaching or suggestion that the eraser tip would have the surface tension properties that achieve the smooth, bubble-free distribution of restorative material. With respect to claim 47, Watmough does nothing to cure these deficiencies of Hirzel in view of Torino and/or Varaine. Therefore, there is no *prima facie* case of obviousness of the pending claims, as amended herein, and Applicant respectfully requests that the amendment be entered, all rejections withdrawn, and a Notice of Allowance issued.

If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants are of the opinion that a one-month extension of time is due with this Amendment. Payment of all charges due for this filing is made on the attached Electronic Fee Sheet. If any additional charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

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